

Curriculum Vitae: Dr. Fumihiko SUEKANE

4/May/2016

PERSONAL DETAILS

Address(work): Research Center for Neutrino Science, Tohoku Univ.
6-3 Azaaoba, Aramaki, Aoba, Sendai, 980-8578, JAPAN
phone: +81-22-795-3930
Email: suekane@awa.tohoku.ac.jp
Date / Place of Birth: March, 10, 1959 / Kagawa, Japan
Nationality: Japanese
Homepage: <http://www.awa.tohoku.ac.jp/~suekane/e/>

EDUCATIONAL RECORD:

1988 Obtained Ph.D from Tokyo Institute of Technology, (T.I.T.).
Thesis title:"Search for Top Quark in e+e- Annihilations at Center of Mass Energy 50GeV"
1983-1987, KEK entrust student. (advisor: Prof. Takahiko Koudo)
1983-1987, Doctor Course of T.I.T., Grad. School of Science and Technology
1981-1983, Master Course of T.I.T., Grad. School of Science and Technology
1977-1981, Undergraduate of T.I.T. (Faculty of Science)

POSITIONS:

1997-now, Associate Professor of Tohoku Univ. Grad. School of Science. (former Imperial Univ.)
2016-now, Guest Professor of Faculty of Science, Toho Univ.
2010-2012, Guest Researcher, Tokyo Institute of Tech, International Research Center of Science
1990-1996, Visiting Researcher of Stanford Linear Accelerator Center (SLAC), USA.
1989-1997, Assistant Professor at Tohoku University Grad. School of Science
1987-1989, Assistant Professor at National Lab. for High Energy Physics (KEK)

ACADEMIC AWARD:

2015: Breakthrough, group prize (<https://breakthroughprize.org/Laureates/1/L154>)
2004: The 1st Koshiba Prize (The prize established by celebrating the Nobel prize for prof. Masatoshi Koshiba)

RESEARCH RECORD and ACHIEVEMENT:

2006-Now, Double Chooz reactor neutrino oscillation experiment in France. The leader of the Japan group by 2013. Identified the indication of the last neutrino mixing angle Θ_{13} .
2014-Now, Sterile Neutrino Experiment at J-PARC accelerator physics laboratory (JSNS²).
1997-2007, KamLAND experiment. One of the core members of this experiment. Discovered reactor neutrino oscillation and measured Geo-neutrinos for the first time.
Awarded the Koshiba prize and Breakthrough, group prize for the achievements.
1989-1997, SLAC SLD electron-positron collider experiment. Produced the Z^0 particle and measured the Weinberg angle which is an essential parameter in the standard model.
1988-1989, KL meson rare decay experiment at KEK-Proton Synchrotron. Most precise measurements of $\mu \rightarrow e$, $\mu \rightarrow \mu$ decay branching ratio.
1983-1987, TRISTAN electron-positron collider experiment at KEK. Searched for the heaviest quark (top quark) with the highest energy at that time.

ACADEMIC MEMBERSHIP

Japan Physical Society (JPS), Japan Association of High Energy Physicists (JAHEP).
Atomic Energy Society of Japan (AESJ). ResearchGate, LinkedIn

ACADEMIC ROLE:

~ Now Referee of scientific journals of Elsevier, APS, JPS, PTEP, IOP, MEXT/JSPS grants
2013, 2014 Referee of JPS technical paper award
2013, Panelist & Reviewer for U.S. DOE intensity frontier research program, @Washington DC.
2008, 2012 Delegate of Japan for IAEA conference on safeguard technologies, @IAEA H.Q. Vienna
2007 Representative of Elementary Particle Physics Division for JPS
2006 Co. Representative of Elementary Particle Physics Division for JPS
1999 Program coordinator for Particle Physics division of JPS
1991, 1994 Stationed officer at SLAC for US/Japan Cooperation Program in High Energy Physics office

CONFERENCE/Meeting ORGANIZATION

International Advisory Committee(IAC): International Workshops on Applied Antineutrino Physics
(AAP2014, 2013, 2012, 2011, 2009, 2007,)

2013 IAC: Erice School (Neutrino Physics, Present and Future)

2012 Organizer of Double Chooz International Collaboration Meeting (@Tohoku Univ.)

2011 Neutrino Session Convener, Int., Conf. on Astroparticle and Underground physics. (TAUP2011)

2010 Organizer: AAP2010@Sendai

2010 Neutrino Session Convener, 35th Int. Conf. on High energy Physics(ICHEP)

2009 IAC: Erice School (Neutrinos in cosmology, Astro, Particle and Nuclear Physics)

2008 IAC: Physics of Massive Neutrino

2008 Organizer: Double Chooz Collaboration Meeting (@Kobe Univ.)

2007 Organizing Committee: TAUP2007

2005 Co-organizer: International Planning Workshop for Reactor Neutrino Experiment

2004 Neutrino Session Convener: ICHEP2004

2004 Organizer, Chairman: 3rd Workshop on Future Low-Energy Neutrino Experiments (FLENE)

2003 Program Committee: 1st and 2nd FLENE

RESEARCH GRANTS

		Kilo Yen	Euro
2016~2018	Grant in Aid Scientific Research B (JSPS)	13,300	99,000
2013~2017	Grant in Aid Scientific Research on Innovative Areas(JSPS)	72,670	540,000
2013~2015	Promotion of Focused Research (from Tohoku Univ.)	10,500	78,000
2013~2015	Grant in Aid for JSPS Fellows (JSPS)	2,400	18,000
2008~2013	Grant in Aid Specially Promoted Research (JSPS)	490,594	3,634,000
2007	Grant in Aid Scientific Research A (JSPS)	3,000	22,000
2004~2006	Grant in Aid Scientific Research A (JSPS)	49,920	370,000
2002~2003	Grant in Aid Scientific on Priority Area (JSPS)	1,900	14,000
2002~2003	Grant in Aid Scientific Research C (JSPS)	4,400	53,000

LECTURE SUBJECTS

University Lectures for Graduate and Undergraduate Classes:

Basic and Advanced Elementary Particle Physics, Special Relativity, Non accelerator Physics,
Dynamics, Physics Mathematics, Experimental Techniques, Introduction to quantum mechanics etc.

Topical Schools/Lectures:

Introduction to Neutrino Oscillation, Reactor Neutrino Oscillation.

For High School Students:

How to detect elementary particles, How to detect neutrino, How to detect Higgs particle.

BOOKS

- (1) "Neutrino Oscillations: A practical guide to Basics and Applications", 2015 Springer,
By F.Suekane.
- (2) "Modern Elementary Particle Physics" (in Japanese). Morikita Publishing Co., Ltd.
By F.Suekane, M.Kuze, J.Shirai and H.Yuta. Being printed.
- (3) "Introduction of Elementary Particle and Nuclear Physics" (Translation), 2011, (Selected Book of
Japanese Library Association). By F.Suekane, J.Shirai and H.Yuta

TOP PAPERS with significant contributions (# of citation is by 3/May/2016)

- (1) "Indication for the disappearance of reactor electron antineutrinos in the Double Chooz experiment"
Double Chooz Collaboration, Phys.Rev.Lett. 108 (2012) 131801. [cite:843]
- (2) "Precision Measurement of Neutrino Oscillation Parameters with KamLAND"
KamLAND collaboration, Phys.Rev.Lett. 100(2008)221803. [cite:739]
- (3) "Precision electroweak measurements on the Z resonance"
ALEPH, DELPHI, L3, OPAL and SLD collaborations. Phys.Rept. 427 (2006) 257-454.[cite:1385]
- (4) "Measurement of neutrino oscillation with KamLAND: Evidence of spectral distortion"
KamLAND collaboration, Phys.Rev.Lett. 94 (2005) 081801, [cite:1247].
- (5) "Experimental investigation of geologically produced antineutrinos with KamLAND"
KamLAND Collaboration, Nature 436 (2005) 499-503, [cite:194]
- (6) "Reactor measurement of θ_{13} and its complementarity to long baseline experiments"
H.Minakata, H.Sugiyama, O.Yasuda, K.Inoue, F.Suekane ,
Phys.Rev. D68 (2003) 033017, Erratum-ibid. D70 (2004) 059901, [cite: 203]
- (7) "First results from KamLAND: Evidence for reactor anti-neutrino disappearance"
KamLAND collaboration, Phys.Rev.Lett. 90 (2003) 021802. [cite:2444].